

REMARKS

Claims 1-13, 15, 17, 21-26 and 30-35 are pending in the application. Claims 1, 21, 30, 33 and 34 are independent claims. Claims 1-13, 15, 17, 21-26 and 30-35 are rejected.

Claim Rejections - 35 USC § 101

Claim 33 stands rejected under 35 USC § 101. The examiner maintains that:

the claimed subject matter is "a classification chain data structure... comprising". Data is not covered by the statutory categories and is not protected by judicial exemptions. Therefore, a data structure is non-statutory matter.

Applicants respectfully disagree and refer the examiner to *In re Lowrey*, 32 F.3d 1579 (Fed. Cir. 1994) (Finding that "More than mere abstraction, the data structures are specific electrical or magnetic structural elements in a memory.").

Applicants therefore respectfully requests withdrawal of the rejection of claim 33 on the basis of 35 U.S.C. § 101.

Claim Rejections - 35 USC § 102

Claims 30-33 stand rejected under 35 U.S.C. 102(e) as being clearly anticipated by Gjerdingen.

Regarding claim 30, the examiner cited Gjerdingen as follows:

A computing system, comprising:

a computing device including:

a classification chain data structure stored thereon having a plurality of classification vectors, wherein each vector includes data representative of a spectral properties class, as classified by humans and spectral properties characteristics as determined by digital signal processing; and (Col. 3, lines 23-61 and Col. 9, lines 28-39)

processing means for comparing an unclassified media entity to the classification chain data structure to determine an estimate of the spectral properties class of the unclassified media entity.
(Col. 6, line 38 - Col. 7, line 2)

The examiner further maintains that:

Gjerdingen teaches a computing system with these features to create a searchable database. Gjerdingen teaches either human or machine classification (Fig. 4, items, 401, 403 and 403B and col. 6, lines 38-64).

But the claim does not claim that a particular audio sample can be classified according to either of human or machine classification. Rather the claim requires that a human classification system is applied to a set of representative sounds, not the audio data itself. Those representative sets of sounds then form the basis against which unclassified audio data is compared.

Claim Rejections - 35 USC § 103

Claims 1-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Blum and Kjaer, U.S. Pat. No. 4,603,386.

Regarding claim 1, the examiner cited to Blum as follows:

A method for automatically classifying spectral properties of audio data, comprising: applying input audio data (1) to a critical band filtering process to form first output data and (2) to an entropy calculation process to form second output data;
(Col. 6, lines 24-28)

applying the first output data to a first derivative process to form third output data; (Col. 6, lines 28-30) and

inputting said first, second and third output data to an averaging process to form a spectral feature vector representing the input audio data. (Col. 6, lines 32-35 and lines 45-48)

The examiner further cited Kjaer as teaching an entropy calculation, wherein a musical tone is classified by notes and accidentals (citing Abstract and Col. 4, line 55 - Col. 7, line 34).

Nevertheless, the Applicants have amended the claim to recite:

comparing the spectral feature vector to a classification chain
containing pre-classified entries to determine at least one
classification of the audio data.

This combination of using signal processing techniques combined with previously classified information is not taught by Blum alone or in combination with the cited references. As such, Applicants respectfully request reconsideration of the rejection of claim 1 and its dependent claims.

Claims 21-26, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Blum and Gjerdingen.

Independent claims 21 and 34 have been amended to clarify the distinction over the prior art. For example, as now recited in claim 21:

comparing unclassified data to the classification chain to
estimate a classification of the unclassified data.

Thus, the claims recited that it is the unclassified data that is compared to the classification chain. The classification chain was created with human input to classify other data, not the unclassified data.

As such, Applicants submit that claims 21-26, 34 and 35 patentably define over Blum in combination with Gjerdingen.

DOCKET NO.: MSFT-0582/167509.02
Application No.: 09/935,349
Office Action Dated: October 5, 2007

**PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116**

CONCLUSION

In the view of the foregoing amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the application for any reason, the Examiner is encouraged to contact Applicants' representative.

Date: October 30, 2007.

/Michael J. Swope/
Michael J. Swope
Registration No. 38,041

Woodcock Washburn LLP
Cira Centre
2929 Arch Street, 12th Floor
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439